

**Temporary Sewage Pumping Station
Ancillary to Tung Chung Area 56 Public Housing Development**

**Monthly Environmental Audit Report No. 17
(Covering the Period from 1 March 2016 to 31 March 2016)**

14 April 2016

Revision 00

Main Contractor



**HSIN新昌
CHONG**

Independent Checker

ATKINS



Client: Hong Kong Housing Authority	Contract No. (if any):
Project Title: Temporary Sewage Pumping Station Ancillary to Tung Chung Area 56 Public Housing Development	Project No.: 5135697
Document No.: 5135697-OR017-00	Controlled Copy No.:
Document Title: Monthly Environmental Audit Report No.16 (Covering the Period from 1 March 2016 to 31 March 2016)	
Covering Letter/Transmittal Ref. No.: 5135697/20.10/OC109/SO/RC	Date of Issue: 14 April 2016

Revision, Review and Approval Records

		/	/	/	/
		/	/	/	/
00	Monthly EA Report No. 17	Ray Chow 14 April 2016	Keith Chau 14 April 2016	Sharifah Or 14 April 2016	Sharifah Or 14 April 2016
Rev.	Description	Prepared by / date	Checked by / date	Reviewed by / date	Approved by / date

Distribution

Controlled Copy No.	Issued to
1 - 5	Environmental Protection Department
6	Hong Kong Housing Authority
7	Hsin Chong Construction Company Ltd.
8	Office Copy



Contents

Executive Summary

1	INTRODUCTION	2
1.1	Basic Project Information.....	2
1.2	Project Organisation	3
1.3	Construction Programme.....	3
1.4	Construction Works Undertaken During the Reporting Period	3
2	ENVIRONMENTAL SITE AUDIT	4
2.1	Site Inspection	4
2.2	Advice on the Solid and Liquid Waste Management Status	4
2.3	Environmental Licenses and Permits	4
2.4	Implementation Status of Environmental Mitigation Measures.....	5
2.5	Summary of Complaints, Notification of Summons and Successful Prosecution.....	5
3	FUTURE KEY ISSUES.....	6
3.1	Construction Programme for the Coming Months	6
3.2	Environmental Site Inspection Schedule for the Coming Month	6
4	CONCLUSION.....	7
4.1	Conclusions	7

Appendices

Appendix A	Location of the Project and the Contract
Appendix B	Project Organization for Environmental Works
Appendix C	Construction Programme
Appendix D	Waste Flow Table
Appendix E	Environmental Licenses and Permits
Appendix F	Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions



Executive Summary

This monthly Environmental Audit Report is prepared for Temporary Sewage Pumping Station Ancillary to Tung Chung Area 56 Public Housing Development (hereafter referred to as “the Project”) for the Hong Kong Housing Authority (HA) of Hong Kong Special Administrative Region. The Project was awarded to Hsin Chong Construction Company Ltd. (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Independent Checker (IC) by the Contractor.

The Project is classified as a “Designated Project”, under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499). A Project Profile (Register No. PP-481/2013) was submitted for direct application of an Environmental Permit (EP) for the Project. The current EP (EP No: EP-452/2013) was issued on 6 June 2013. These documents are available through the EIA Ordinance Register. Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014.

This is the seventeenth monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 March 2016 to 31 March 2016.

Complaint Log

There were no environmental complaints received during the reporting period.

Notifications of Summons and Successful Prosecutions

There were no notifications of summons or prosecutions received during this reporting period.

Future Key Issues

The future key issues include potential noise impact, air quality impact, water quality impact and waste management arising from the following construction activities to be undertaken in the upcoming month:

- Internal finishes.



1 INTRODUCTION

1.1 Basic Project Information

- 1.1.1 This monthly Environmental Audit Report is prepared for Temporary Sewage Pumping Station Ancillary to Tung Chung Area 56 (hereafter referred to as “the Project”) for the Hong Kong Housing Authority (HA) of Hong Kong Special Administrative Region. The Project was awarded to Hsin Chong Construction Company Ltd. (hereafter referred to as “the Contractor”) and Atkins China Limited was appointed as the Independent Checker (IC) by the Contractor.
- 1.1.2 The Project is classified as a “Designated Project”, under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap 499). A Project Profile (Register No. PP-481/2013) was submitted for direct application of Environmental Permit (EP). The current EP (EP No: EP-452/2013) was issued on 6 June 2013. These documents are available through the EIA Ordinance Register. Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014. The works areas of the Project and the Contract are shown in **Appendix A**.
- 1.1.3 A Temporary Sewage Pumping Station (TSPS) was proposed as an ancillary facility to the proposed Tung Chung Area 56 Public Housing Development, to collect the sewage solely from the Tung Chung Area 56 Public Housing Development only and discharge it to the existing public sewer at Ying Hei Road.
- 1.1.4 The proposed TSPS is an un-manned facility and is not considered as a sensitive use susceptible to the influence of to external potential environmentally polluting uses.
- 1.1.5 According to the Planning Department’s Tung Chung Town Centre Area Layout Plan No. L/I-TCTC/1E, a permanent sewage pumping station (SPS) will be provided in the Tung Chung Area 104 located to the northeast of the Tung Chung Area 56. Upon the intake of the population of Tung Chung Area 56 Public Housing Development, the TSPS is expected to provide a few years of service to the public housing development. Upon the commissioning of the permanent sewage pumping station in Tung Chung Area 104, sewage generated in Tung Chung Area 56 public housing development will be conveyed to SPS in Tung Chung Area 104 and the operation of the TSPS in Area 56 will be terminated. The infrastructure works including permanent foul water pipes and manhole to the permanent SPS in Tung Chung Area 104 is scheduled to be provided during the construction period of the Tung Chung Area 56 public housing development for ease of future transition operations. Thus the TSPS in Area 56 is of temporary nature.
- 1.1.6 This is the seventeenth monthly Environmental Audit Report for the Project which summaries the audit findings during the reporting period from 1 March 2016 to 31 March 2016.



1.2 Project Organisation

1.2.1 The project organization structure and lines of communication with respect to the on-site environmental management structure is shown in **Appendix B**. The key personnel contact names and numbers are summarized in **Table 1.1**.

Table 1.1 Contact Information of Key Personnel

Party	Position	Name	Telephone	Fax
Engineer or Engineer's Representative (Hong Kong Housing Authority)	Civil Engineer	Rachel Fung	2129 3709	2129 3095
Contractor (Hsin Chong Construction Company Ltd.)	Site Agent	Ivan Ho	9383 8280	3480 1791
	Environmental Manager	Pan Fong	9436 9435	
	Environmental Supervisor	Connie Cheng	9656 1417	
Independent Checker (Atkins China Limited)	Independent Checker	Ray Chow	2972 1305	2890 6343

1.3 Construction Programme

1.3.1 A copy of the Contractor's construction programme is provided in **Appendix C**.

1.4 Construction Works Undertaken During the Reporting Period

1.4.1 A summary of the construction activities undertaken during the reporting period is shown below:

- Construction from ground floor to roof; and
- Internal finishes.



2 ENVIRONMENTAL SITE AUDIT

2.1 Site Inspection

- 2.1.1 Site Inspections were carried out on a weekly basis to monitor the implementation of proper environmental protection and pollution control mitigation measures for the Project. During the reporting period, site inspections were carried out on 1, 8, 15 and 22 March 2016.
- 2.1.2 For the observation issued on 23 February 2016 regarding the storage of surface retarder, the contractor has removed the surface retarder from site. The observation was closed on 1 March 2016.
- 2.1.3 No observation was raised during the site inspections in the reporting period.

2.2 Advice on the Solid and Liquid Waste Management Status

- 2.2.1 The Contractor registered as a chemical waste producer for the Project. Sufficient numbers of receptacles were available for general refuse collection and sorting.
- 2.2.2 The monthly summary of waste flow table is detailed in **Appendix D**.
- 2.2.3 The Contractor was reminded to store the chemical waste containers properly on site in accordance with the Code of Practise on the Packaging, Labelling and Storage of Chemical Wastes.

2.3 Environmental Licenses and Permits

- 2.3.1 The valid environmental licenses and permits during the reporting period are summarized in **Appendix E**.



2.4 Implementation Status of Environmental Mitigation Measures

- 2.4.1 The Contractors has carried out mitigation measures recommended in the Project Profile and EP.

2.5 Summary of Complaints, Notification of Summons and Successful Prosecution

- 2.5.1 There were no complaints received during the reporting period.
- 2.5.2 No notification of summons and prosecution was received during the reporting period.
- 2.5.3 Statistics on environmental complaints, notifications of summons and successful prosecutions are summarized in **Appendix F**.



3 FUTURE KEY ISSUES

3.1 Construction Programme for the Coming Months

3.1.1 According to the Contractor, the major construction activity for April 2016 includes:

- Internal finishes.

3.2 Environmental Site Inspection Schedule for the Coming Month

3.2.1 The tentative schedule for weekly site inspections for April 2016 is 5, 12, 19 and 26 April 2016.



4 CONCLUSION

4.1 Conclusions

- 4.1.1 Site preparation works of the Project started on 14 November 2014 and the construction works of the Project commenced on 19 November 2014.
- 4.1.2 The weekly site inspections were carried out on 1, 8, 15 and 22 March 2016. No observation was raised during the site inspections in the reporting period. The Contractors has carried out mitigation measures recommended in the Project Profile and EP.
- 4.1.3 There were no environmental complaints received during the reporting period.
- 4.1.4 No notification of summons and successful prosecution were received during the reporting period.



APPENDIX A

Location of the Project and the Contract



0 50 100 150 Meters

Tung Chung Bay

TEMPORARY SEWAGE PUMPING STATION

Area 104

Area 89

Tung Chung Area 56


Area 55b

Ying Hei Road

North Lantau Expressway

Man Tung Road

LEGEND

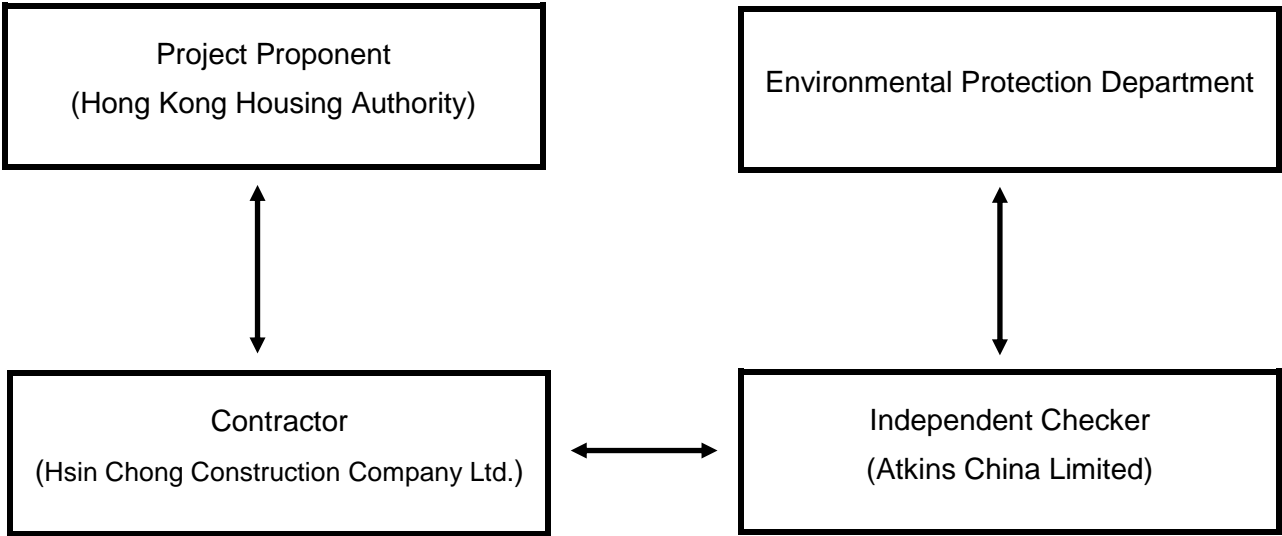
-  Temporary Sewage Pumping Station
-  Site Boundary of Tung Chung Area 56 Public Housing Development
-  500 m from Temporary Sewage Pumping Station



APPENDIX B

Project Organization for Environmental Works

Project Organization for Environmental Works



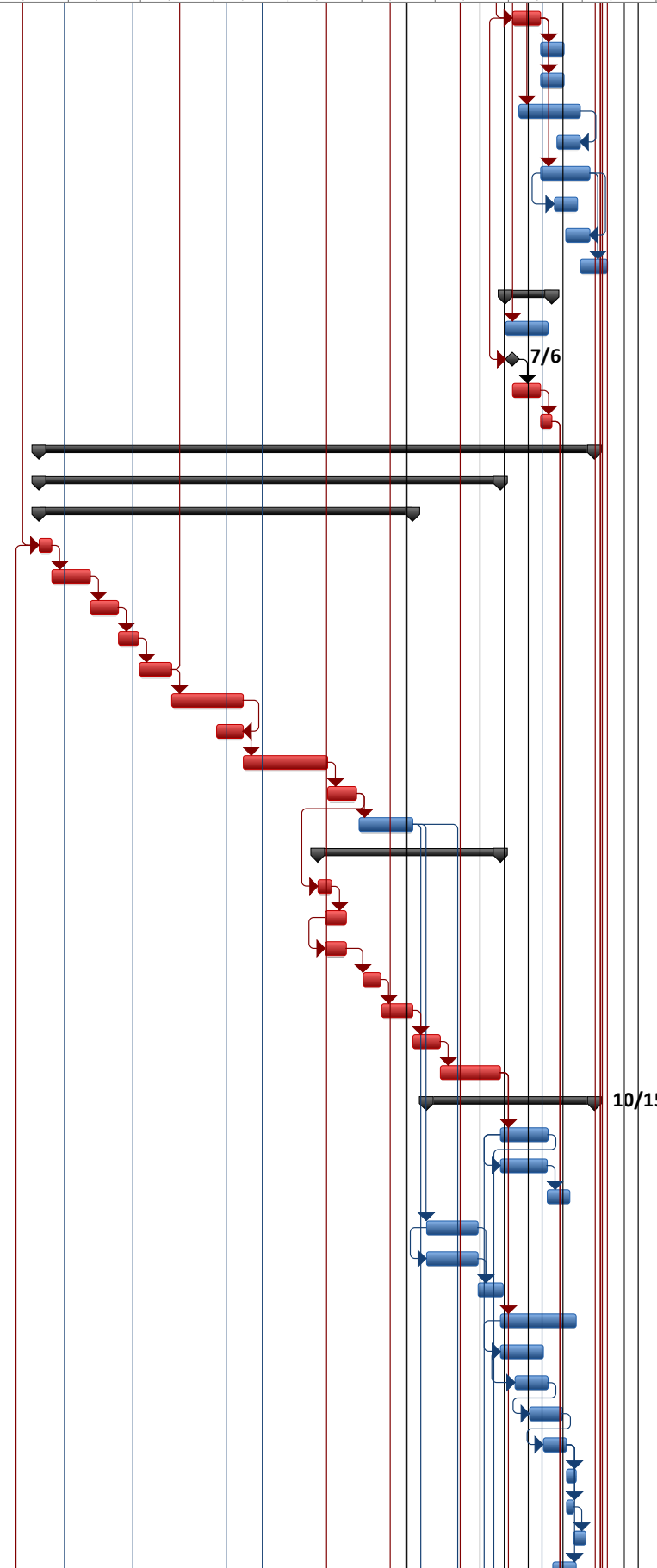


APPENDIX C

Construction Programme

Construction of Public Rental Housing Development at Tung Chung Area 56

ID	Task Name	Start	Finish	Duration	Predecessors	2014				2015				2016						
						1st Half		2nd Half		1st Half		2nd Half		1st Half		2nd Half				
						Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4		
629	Internal plastering, screeding & tiling	Jul 6 '16	Aug 9 '16	30 days	624SS+7 days															
630	Doors & ironmongeries	Aug 10 '16	Sep 7 '16	25 days	629															
631	Sanitary fittings & toilet cubicles	Aug 10 '16	Sep 7 '16	25 days	629															
632	Steel and metal works	Jul 14 '16	Sep 27 '16	65 days	624															
633	Roller shutter	Aug 30 '16	Sep 27 '16	25 days	632FF															
634	Painting works	Aug 10 '16	Oct 9 '16	52 days	629															
635	Signage	Aug 27 '16	Sep 24 '16	25 days	634SS+15 days															
636	CPA Fixing	Sep 10 '16	Oct 9 '16	25 days	634FF															
637	Furniture, fittings, shelving & racks	Sep 28 '16	Oct 31 '16	28 days	634FS-10 days															
638	Building services installation	Jun 27 '16	Aug 23 '16	49 days																
639	Building services installation	Jun 27 '16	Aug 18 '16	45 days	620															
640	Handover water tanks & pump rooms to NSC	Jul 6 '16	Jul 6 '16	0 days	629SS															
641	FS Pipe & water pump installation	Jul 6 '16	Aug 9 '16	30 days	640															
642	Testing & commissioning (EL, FS, P&D)	Aug 10 '16	Aug 23 '16	12 days	641															
643	Supermarket, TSPS, RCP	Nov 25 '14	Oct 15 '16	532 days																
644	RC structure	Nov 25 '14	Jun 20 '16	433 days																
645	TSPS	Nov 25 '14	Mar 3 '16	348 days																
646	Submit and Approval of Environmental Office (TSPS)	Nov 25 '14	Dec 10 '14	14 days	69SS															
647	Pipe pile & King Post installation & grout curtain (TSPS)	Dec 11 '14	Jan 27 '15	37 days	646															
648	Pumping test and report submission (TSPS)	Jan 28 '15	Mar 3 '15	25 days	647															
649	Submit as-built record to CM for Approval (TSPS)	Mar 4 '15	Mar 28 '15	22 days	648															
650	Submit ICU14 & Obtain CM's Approval for ELS Work (TSPS)	Mar 30 '15	May 8 '15	30 days	649															
651	ELS for the footing (TSPS) & Plate Load Test	May 9 '15	Aug 5 '15	60 days	650															
652	Submit as-built ELS record to ICU (TSPS)	Jul 4 '15	Aug 5 '15	22 days	651FF															
653	Footing construction (TSPS)	Aug 6 '15	Nov 18 '15	80 days	652															
654	Footing to G/F beam and slab construction (TSPS)	Nov 19 '15	Dec 24 '15	30 days	653															
655	G/F - roof construction (TSPS)	Dec 28 '15	Mar 3 '16	50 days	654															
656	RCP & Supermarket	Nov 7 '15	Jun 20 '16	175 days																
657	Sheet pile installation (RCP, Supermarket)	Nov 7 '15	Nov 23 '15	14 days	654FS-40 days															
658	Submit as-built record to CM for Approval (RCP, Supermarket)	Nov 16 '15	Dec 11 '15	22 days	657FS-7 days															
659	Submit ICU14 & Obtain CM's Approval for ELS Work (RCP & Supermarket)	Nov 16 '15	Dec 11 '15	22 days	658SS															
660	Excavation for the footing (RCP/Supermarket) & Plate Load Test	Jan 2 '16	Jan 23 '16	16 days	659FS+15 days															
661	Footing construction (RCP/Supermarket)	Jan 25 '16	Mar 3 '16	30 days	660															
662	Footing to G/F beam and slab construction (RCP/Supermarket)	Mar 4 '16	Apr 6 '16	25 days	661															
663	G/F - roof construction (RCP/Supermarket)	Apr 7 '16	Jun 20 '16	60 days	662															
664	Finishes	Mar 21 '16	Oct 15 '16	170 days																
665	Internal Finishes - RCP	Jun 21 '16	Aug 18 '16	50 days	663															
666	Roof screeding & waterproofing - RCP	Jun 21 '16	Aug 17 '16	49 days	665SS															
667	Green roof/sitting bench - RCP	Aug 18 '16	Sep 14 '16	25 days	666															
668	Internal Finishes - TSPS	Mar 21 '16	May 23 '16	49 days	655FS+14 days															
669	Roof screeding & waterproofing - TSPS	Mar 21 '16	May 23 '16	49 days	668SS															
670	Roofing & railing - TSPS	May 24 '16	Jun 23 '16	25 days	669,668															
671	Internal Finishes - Supermarket	Jun 21 '16	Sep 22 '16	80 days	663															
672	Roof Basket Ball Court Finishes & Roof Finishes - Supermarket	Jun 21 '16	Aug 12 '16	45 days	671SS															
673	External wall plastering	Jul 9 '16	Aug 18 '16	35 days	672SS+15 days															
674	External wall textured spray painting	Jul 27 '16	Sep 5 '16	35 days	673FS-20 days															
675	Shop front & window glazing, glass doors	Aug 13 '16	Sep 10 '16	25 days	674FS-20 days															
676	Water Test to Shop Front	Sep 11 '16	Sep 22 '16	10 days	675															
677	Doors & ironmongeries	Sep 11 '16	Sep 19 '16	7 days	675															
678	Sanitary fittings & toilet cubicles	Sep 20 '16	Oct 4 '16	12 days	677															
679	Steel and metal works	Aug 25 '16	Sep 22 '16	25 days	675FS-15 days															





APPENDIX D

Waste Flow Table

**Temporary Sewage Pumping Station
Ancillary to Tung Chung Area 56 Public Housing Development
Waste Flow Table**

Month	Estimated Annual Quantities of Inert C&D Materials (in '000 Kg)					Estimated Quantities of C&D Waste					
	Total Quantity Generated	Suitable for Recycled Aggregates	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/cardboard packaging	Plastics (see Note 2)	Chemical Waste	Others, e.g. general refuse	Timber
	(a)	(b)	(c)	(d)	(e=a-b-c-d)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000litre)	(in '000 Kg)	(in '000 Kg)
2014											
November	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.160	0.000
December	4.910	0.000	0.000	0.000	4.910	0.000	0.000	0.000	0.000	5.830	0.000
2015											
January	5.970	0.000	0.000	0.000	5.970	0.000	0.000	0.000	0.000	2.880	0.000
February	4.540	0.000	0.000	0.000	4.540	0.000	0.000	0.000	0.000	2.450	0.000
March	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.480	0.000
April	1097.040	0.000	0.000	0.000	1097.040	0.000	0.000	0.000	0.000	1.930	0.000
May	467.250	0.000	0.000	0.000	467.250	0.000	0.000	0.000	0.000	6.520	0.000
June	1237.690	0.000	0.000	0.000	1237.690	0.000	0.000	0.000	0.000	9.720	0.000
July	61.480	0.000	0.000	0.000	61.480	0.000	0.000	0.000	0.000	8.680	0.000
August	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	5.210	0.000
September	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.170	0.000
October	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.180	0.000
November	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.940	0.000
December	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	8.380	0.000
2016											
January	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.820	0.000
February	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.230	0.000
March	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	7.640	0.000
April											
May											
Grand Total	2878.880	0.000	0.000	0.000	2878.880	0.000	0.000	0.000	0.000	96.220	0.000

Notes: (1) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

(2) Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material



APPENDIX E

Environmental Licenses and Permits

Summary of Environmental Licences and Permits Application and Status

Environmental Permit (EP)

EP No.	EP Holder	Date of EP Issued	Expiry Date	Area Coverage	Status
EP-452/2013	Hong Kong Housing Authority	6 Jun 2013	N/A	TSPS Only	Active

Notification of Carrying Out Notifiable Works under Air Pollution Control (Construction Dust) Regulation

Notification Ref. No.	Area Coverage	Valid Since	Expiry Date
367052	Entire Site of the Contract (include TSPS)	13 Nov 2013	N/A

Billing Account for Disposal of Construction Works

Billing Account No.	Area Coverage	Valid Since	Expiry Date
7018949	Entire Site of the Contract (include TSPS)	16 Dec 2013	N/A

Chemical Waste Producer Registration

Waste Producer No.	Area Coverage	Major Chemical Waste Type	Valid Since	Expiry Date
5213-950-H2913-43	Entire Site of the Contract (include TSPS)	Spent lubricant, Spent Flammable Liquid, Spent organic solvent, contaminated rags	19 Nov 2014	N/A

Wastewater Discharge Licence

Licence Number	Area Coverage	Valid Since	Expiry Date
WT00018218-2014	Entire Site of the Contract (include TSPS)	30 Jan 2014	31 Jan 2019

Construction Noise Permit (CNP)

CNP Number	Area Coverage	Valid Since	Expiry Date	Current Status
GW-RS1162-14	Entire Site of the Contract (include TSPS)	24 Oct 2014	23 Apr 2015	Expired
GW-RS0418-15	Entire Site of the Contract (include TSPS)	24 Apr 2015	23 Oct 2015	Expired
GW-RS1088-15	Entire Site of the Contract (include TSPS)	24 Oct 2015	23 Apr 2016	Expired, as renewed as GW-RS1379-15
GW-RS1379-15	Entire Site of the Contract (include TSPS)	29 Dec 2015	28 Jun 2016	Active



APPENDIX F

Statistics on Environmental Complaints, Notification of Summons and Successful Prosecutions

Cumulative Statistics on Complaints, Notifications of Summons and Successful Prosecutions

Reporting period	Complaints	Notifications of Summons	Successful Prosecutions
17th Reporting Month (1 Mar 2016 – 31 Mar 2016)	0	0	0
Cumulative Statistics (19 Nov 2014 – 31 Mar 2016)	0	0	0